

CLAIMS

1. Recognition unit (2) for recognizing synchronization signals in at
5 least one audiovisual programme (15) received, said audiovisual programme
(15) comprising an audiovisual content intended to be transmitted to users
and control information, said recognition unit (2) comprising:
- a reception module (21, 24) and a recording module (25) for
recording in a storage space (20), recognition elements (11) making it
10 possible to obtain at least one extracted portion of the content of said
audiovisual programme (15),
 - a reception module (21) for receiving via a broadcasting
network (81), at least one transmitted stream carrying said audiovisual
programme (15),
 - 15 - a detection module (22) for detecting said synchronization
signals (11) in said audiovisual programme (15) received, by means of said
recognition elements (11) stored in said storage space (20), by recognition in
the content of said audiovisual programme (15) received, of said extracted
portion,
 - 20 - and a transmission module (23) for transmitting action
instructions (12) in case of detection of said synchronization signals in said
audiovisual programme (15), said instructions (12) being designed to trigger
at least one action,
- 25 characterized in that the module (21, 24) for receiving the
recognition elements (11) is designed to receive among said recognition
elements (11), instructions for extracting said extracted portion from at least
one stream of an audiovisual programme previously received by the stream
reception module (21), and in that said recording module (25) is designed to
30 directly extract said portion of said stream according to said extraction
instructions and to record the said portion in the storage space (20).

2. Recognition unit (2) according to Claim 1, characterized in that the module (21, 24) for receiving the recognition elements (11) is designed to receive a triggering message and in that the recording module (25) is designed to extract and record upon receipt of said triggering message, said
5 portion of said previously received stream.

3. Recognition unit (2) according to one of Claims 1 or 2, characterized in that the module (24) for receiving the recognition elements (11) is also designed to receive among said recognition elements (11), at
10 least one identifier of said extracted portion, and in that said detection module (22) is capable of retrieving from the storage space (20) said previously recorded extracted portion associated with said identifier, so as to recognize in the content of said audiovisual programme (15) received said
15 extracted portion.

4. Recognition unit (2) according to any one of the preceding claims, characterized in that the module (24) for receiving the recognition elements (11) is also designed to receive directly the said extracted portion among the said recognition elements (11) and the recording module (25) is
20 designed to record the said extracted portion in the storage space (20).

5. Recognition unit (2) according to any one of the preceding claims, characterized in that the recognition unit (2) also comprises a timeout module (26) before despatch of said action instructions (12) by the
25 transmission module (23).

6. Recognition unit (2) according to any one of the preceding claims, characterized in that the modules for receiving (24) and for recording (25) recognition elements (11) and the module for transmitting (23) action
30 instructions (12) are designed to respectively receive, record and transmit identifiers (12) relating to the said actions to be triggered.

7. Recognition unit (2) according to any one of the preceding claims, characterized in that each of said portions of content consists of at least one of the following portions: a picture, a piece of a picture, a sound and any combination of at least two of said portions.

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8. Recognition unit (2) according to any one of the preceding claims, characterized in that said recognition elements (11) include at least one Boolean operator, said detection module (22) being designed to detect at least two of said portions of content in conjunction with said Boolean operator and the transmission module (23) being designed to transmit said action instructions (12) in case of such detection.

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9. Recognition unit (2) according to any one of the preceding claims, characterized in that said recognition elements (11) include at least one time information item, said detection module (22) being designed to detect said portions of content in conjunction with said time information item and the transmission module (23) being designed to transmit said action instructions (12) in case of such detection.

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10. Recognition unit (2) according to Claim 9, characterized in that said time information item comprises at least one information item chosen from among a date of detection and a detection time slot.

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11. Recognition unit (2) according to any one of the preceding claims, characterized in that said recognition elements (11) include at least one channel reference, said detection module (22) being designed to detect said portions of content in conjunction with said channel reference and the transmission module (23) being designed to transmit said action instructions (12) in case of such detection.

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12. Specification unit (1) for specifying synchronization signals associated with at least one audiovisual programme (15), said audiovisual

programme (15) comprising an audiovisual content intended to be transmitted to users and control information, and said synchronization signals being intended to be detected in at least one stream carrying said audiovisual programme (15) transmitted via a broadcasting network (81) and
5 to thus trigger at least one action,

characterized in that said specification unit (1) comprises:

- a preparation module (34) for preparing recognition elements (11) making it possible to obtain at least one extracted portion of the content of said audiovisual programme (15),
10 - and a transmission module (37) for transmitting said recognition elements (11) independently of transmissions of said audiovisual programme (15), to at least one recognition unit (2) intended to detect said synchronization signals in said transmitted stream carrying said audiovisual programme (15), by recognizing said extracted portion in the content of said
15 audiovisual programme (15),

and in that the preparation (34) and transmission (37) modules of said unit (1) are designed respectively to prepare and transmit extraction instructions, in at least one stream of an audiovisual programme previously received by the recognition unit (2) via the broadcasting network (81), for
20 extracting said portion of content,

said specification unit (1) preferably being capable of cooperating with said recognition unit (2) in accordance with any one of Claims 1 to 11.

13. Specification unit (1) according to Claim 12, characterized in
25 that the preparation (34) and transmission (37) modules of said unit (1) are designed respectively to prepare and transmit identifiers (12) relating to said actions to be triggered in the case of detection of said synchronization signals.

30 14. Specification unit (1) according to Claim 13, characterized in that said action identifiers (12) relate to at least one of the following actions: transmission of an interactive service (S), triggering of an interactive service

(S), triggering of an update of an interactive service (S), triggering of a recording of said audiovisual programme (15) and connection to a website.

15. Synchronization system (5) comprising:

5 - a specification unit (1) for specifying synchronization signals associated with at least one audiovisual programme (15), said audiovisual programme (15) comprising an audiovisual content intended to be transmitted to users and control information,

10 - a recognition unit (2) for recognizing said synchronization signals in at least one stream carrying said audiovisual programme (15) transmitted via a broadcasting network (81), by recognizing at least one extracted portion of the content of said audiovisual programme (15), in the audiovisual programme received,

15 - and an activation unit (3) designed to trigger at least one action in the case of detection of said synchronization signals by the recognition unit (2),

 characterized in that the specification unit (1) is designed to prepare and transmit to the recognition unit (2) recognition elements (11) making it possible to obtain said extracted portion and comprising
20 instructions for extracting said portion of the content from at least one stream of an audiovisual programme previously received by the recognition unit (2) via the broadcasting network (81), and in that the recognition unit (2) is designed to directly extract said portion of said stream according to said extraction instructions and to record said portion,

25 the recognition unit (2) preferably being in accordance with any one of Claims 1 to 11 and the specification unit (1) preferably being in accordance with any one of Claims 12 to 14.

16. Broadcasting centre (50), characterized in that it comprises a
30 device chosen from among at least a specification module (1) in accordance with any one of Claims 12 to 14, a recognition module (2) in accordance with

any one of Claims 1 to 11, and a synchronization system in accordance with Claim 15.

5 17. Services operator (60), characterized in that it comprises a device chosen from among at least a specification module (1) in accordance with any one of Claims 12 to 14, a recognition module (2) in accordance with any one of Claims 1 to 11, and a synchronization system in accordance with Claim 15.

10 18. Terminal (70) for receiving audiovisual programmes (15), characterized in that it comprises a device chosen from among at least a specification module (1) in accordance with any one of Claims 12 to 14, a recognition module (2) in accordance with any one of Claims 1 to 11, and a synchronization system in accordance with Claim 15.

15 19. Process for activation by recognition of synchronization signals in at least one audiovisual programme (15) received, said audiovisual programme (15) comprising an audiovisual content intended to be transmitted to users and control information, said process comprising the
20 following steps:

- reception via a broadcasting network (81), of at least one transmitted stream carrying said audiovisual programme (15),
 - detection of said synchronization signals (11) in said audiovisual programme (15) received by means of recognition elements (11)
25 making it possible to obtain at least one extracted portion of the content of said audiovisual programme (15) and stored in a storage space (20), by recognizing said extracted portion, in the content of said audiovisual programme (15),
 - and triggering of at least one action in case of detection of the
30 said synchronization signals in said audiovisual programme (15),
- characterized in that said recognition elements (11) including instructions for extracting said extracted portion from at least one stream of a

previously received audiovisual programme, said portion of said previously received stream is extracted directly according to said extraction instructions and said portion is recorded in the storage space (20),

5 said recognition process preferably being implemented in particular by means of a recognition unit (1) in accordance with any one of Claims 1 to 11.

20. Specification process for specifying synchronization signals associated with at least one audiovisual programme (15), said audiovisual
10 programme (15) comprising an audiovisual content intended to be transmitted to users and control information, and said synchronization signals being intended to be detected in at least one stream carrying said audiovisual programme (15) transmitted via a broadcasting network (81) and to thus trigger at least one action,

15 characterized in that said specification process comprises the following steps:

 - preparation of recognition elements (11) making it possible to obtain at least one extracted portion of the content of said audiovisual programme (15),

20 - transmission of said information independently of transmissions of said audiovisual programme (15), for detection of said synchronization signals in said transmitted stream carrying the said audiovisual programme (15), by recognizing said extracted portion in the content of said audiovisual programme (15),

25 - and transmission of extraction instructions, in at least one stream of an audiovisual programme previously received by the recognition unit (2) via the broadcasting network (81), for extracting said portion of content,

 said specification process preferably being implemented by means of a specification unit (1) in accordance with any one of Claims 12 to
30 14.

21. Synchronization process comprising the following steps:

- a step of specifying synchronization signals associated with at least one audiovisual programme (15), said audiovisual programme (15) comprising an audiovisual content intended to be transmitted to users and control information, in which step recognition elements (11) making it possible to obtain at least one extracted portion of the content of said audiovisual programme (15) are specified for said detection,

- a step of detecting said synchronization signals in at least one stream carrying said audiovisual programme (15) transmitted via a broadcasting network (81), in which step said synchronization signals are detected in said audiovisual programme received, by recognizing said extracted portion in the content of said audiovisual programme (15),

- and a step of triggering at least one action in case of detection of said synchronization signals,

characterized in that said recognition elements (11) comprising instructions for extracting said portion of content from at least one stream of an audiovisual programme previously received by the recognition unit (2) via the broadcasting network (81) are prepared and transmitted to the recognition unit (2), and in that said portion of said stream is extracted directly according to said extraction instructions and said portion is recorded,

said synchronization process preferably being implemented by the synchronization system (5) of Claim 15.

22. Computer program product, characterized in that it comprises program code instructions for the execution of the steps of one of the processes according to one of Claims 19 to 21 when the said program is executed on a computer.